From-WesternGeco Legal

[0015] The present invention and its advantages will be better understood by referring to the following detailed description and the attached drawings in which:

Figure la illustrates a series of vibrator sweeps and listen times;

Figure 1b illustrates the superposition of the sweeps and listen times of Figure la to represent a cascaded sweep sequence;

Figure Ic illustrates a modified cascaded sweep data sequence from the data of Figure 1b;

Figure 1d illustrates a cascaded sweep data sequence after noise has been removed;

Figure 2 illustrates a flowchart of the present invention;

Figure 3 illustrates data from a sweep sequence showing an original sweep sequence panel, a panel showing data with noise removed according to the method of the present invention, and the difference of the original and data panel after noise removal;

Figure 4 illustrates data from a sweep sequence showing an original sweep sequence panel, a panel showing data after noise removal according to the method of the present invention, and the difference of the original and data panel after noise removal.

Figure 5 is a flowchart of a denoising process as applied to a modified cascaded sweep data sequence.

AMENDMENTS TO THE SPECIFICATION

Please replace paragraph 15 with the following amended paragraph:

[0015] The present invention and its advantages will be better understood by referring to the following detailed description and the attached drawings in which:

Figure la illustrates a series of vibrator sweeps and listen times;

Figure 1b illustrates the superposition of the sweeps and listen times of Figure 1a to represent a cascaded sweep sequence;

Figure 1c illustrates a modified cascaded sweep data sequence from the data of Figure 1b;

Figure 1d illustrates a cascaded sweep data sequence after noise has been removed;

Figure 2 illustrates a flowchart of the present invention;

Figure 3 illustrates data from a sweep sequence showing an original sweep sequence panel, a panel showing data with noise removed according to the method of the present invention, and the difference of the original and data panel after noise removal;

Figure 4 illustrates data from a sweep sequence showing an original sweep sequence panel, a panel showing data after noise removal according to the method of the present invention, and the difference of the original and data panel after noise removal.

Figure 5 is a flowchart of a denoising process as applied to a modified cascaded sweep data sequence.